



Long Island, New York, USA. The technique has existed for at least 20 years and the general principle and structure of a suitable wire bonding apparatus is described in, for example, US 4693778, the contents of which are incorporated herein by reference.

The applicant's copending International Application No. filed on 28 May 1998 describes the way in which such a wire bonding technique can be used to manufacture windings for use in position sensors. More specifically, the windings are formed by bonding an enamelled copper wire onto a suitable substrate in the required pattern. In this embodiment, the eight windings of the digitising tablet 9 are formed on a separate substrate which are then superimposed on top of each other to form a multi layered structure. More specifically, in this embodiment, the layered structure is formed by firstly winding the wire onto a wiring loom (not shown) in the required pattern in order to form a first one of the eight windings. This winding is then sandwiched between first and second substrates to trap the wires in place. Another winding is then created using the wiring loom and then sandwiched between the second substrate and a third substrate. This process is then repeated until all eight windings have been sandwiched between two substrates.

Figure 4e shows a cross-sectional view along the X axis of the digitising tablet 9 shown in Figure 1. As shown, there are nine substrate layers 45-1 to 45-9 which sandwich the eight separate windings 41-1 to 41-8. The top substrate layer 45-1 also acts as a protective layer which may have printed material on the top surface depending on the application for the X-Y digitising tablet. As shown, in this embodiment, the windings for the X position measurement are arranged in alternating